M3T-FLX-80NRA

Converter Board for Connecting 100-core Flexible Board FLX100 to 80-pin 0.8-mm-pitch QFP

User's Manual

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- This product has been developed by assuming its use for program development and evaluation in laboratories. Therefore, it does not fall under the application of Electrical Appliance and Material Safety Law and protection against electromagnetic interference when used in Japan.

CAUTION	If the requirements shown in the "CAUTION" sentences are ignored, the equipment may cause personal injury or damage to the products.

Renesas Tools Homepage http://www.renesas.com/en/tools

1. Outline

The M3T-FLX-80NRA is a converter board for connecting the 100-core flexible cable FLX100 to a foot pattern for 80-pin 0.8-mm-pitch QFP (80P6N-A).

2. Package Components

(1) M3T-FLX-80NRA converter board
(2) YQSOCKET080RAF (2 pieces) (made by Tokyo Eletech Corporation)
(pre-mounted on the M3T-FLX-80NRA)
(3) YQPACK080RA (made by Tokyo Eletech Corporation)
(4) NQPACK080RA (made by Tokyo Eletech Corporation)
(5) YQ-GUIDE (4 pieces) (made by Tokyo Eletech Corporation)
(6) M3T-FLX-80NRA User's Manual (This manual)

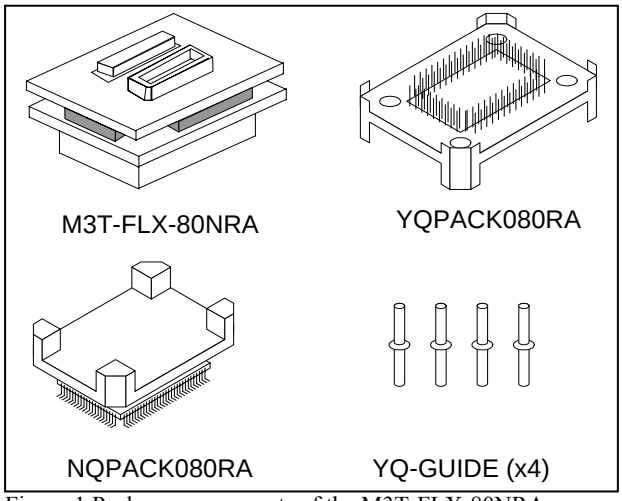

Figure 1 Package components of the M3T-FLX-80NRA

3. Specifications

Table 1 Specifications

Applicable package	80P6N-A (80-pin 0.8-mm-pitch QFP)
	80P6U-A (80-pin 0.8-mm-pitch LQFP)
Insertion/removal iterations of connector	20 times guaranteed

4. Usage

The M3T-FLX-80NRA can be used for debugging and board mounted evaluation in common by mounting the NQPACK080RA on the target board.

(1) For debugging
Mount the NQPACK080RA and YQPACK080RA on the foot pattern of the target board in that order. And connect the probe tip of the emulator to the upper connector of the M3T-FLX-80NRA. Then connect the YQPACK080RA and the M3T-FLX-80NRA.

(2) For onboard evaluation
Mount an MCU with on-chip flash memory or one-time PROM and the HQPACK080RA168 (separately available) or HQPACK080RA160 (separately available) in that order on the NQPACK080RA on the target system.

Before using the M3T-FLX-80NRA, be sure to read "7. Precautions" on page 4.

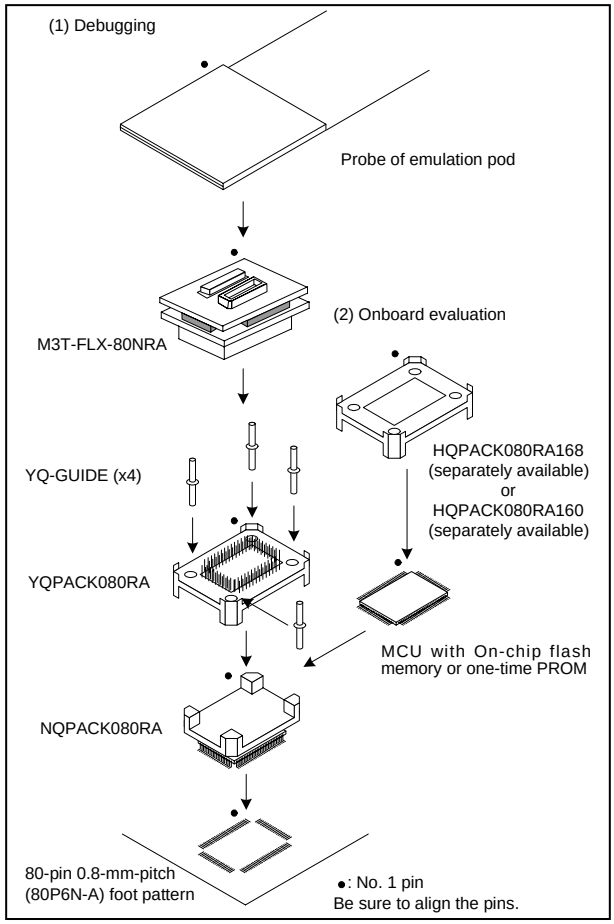

Figure 2 Usage of the M3T-FLX-80NRA

5. Connection Procedure (See Figure 3)

The procedure for connecting the M3T-FLX-80NRA is shown below.

(1) Mount the NQPACK080RA on the target system.

(2) Attach the YQPACK080RA on the NQPACK080RA.

(3) Secure the four corners of the YQPACK080RA with the YQ-GUIDE's.

> - **Do not use the screws included with the YQPACK080RA for fixing the YQPACK080RA.**
> - **The screwdriver included with the NQPACK080RA is used for fixing the HQPACK080RA. Do not use if for fixing the YQ-GUIDE's.**

(4) Attach the M3T-FLX-80NRA on the YQPACK080RA.

(5) Connect the probe tip of the emulator to the M3T-FLX-80NRA.

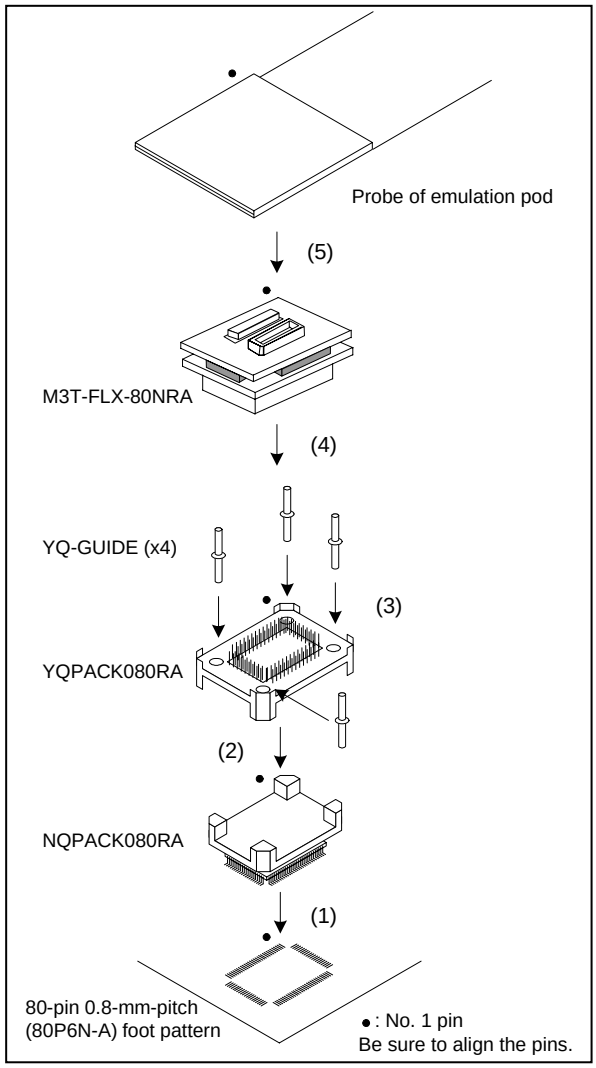

Figure 3 Connection procedure of the M3T-FLX-80NRA

6. External Dimensions and a Sample Foot Pattern

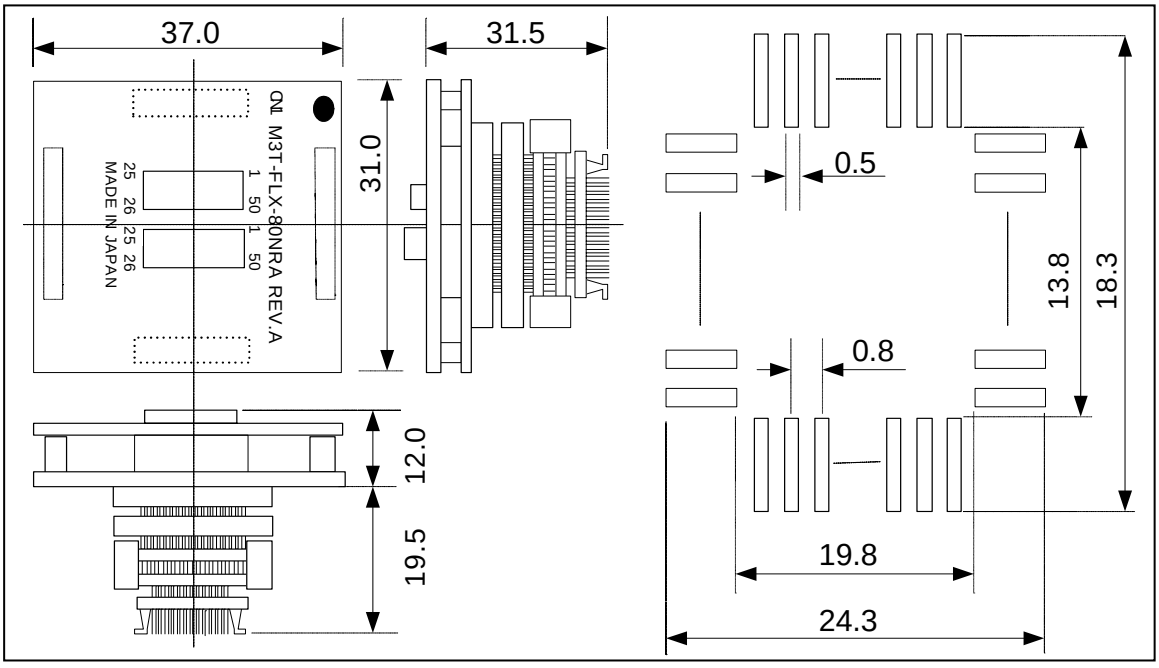

Figure 4 External dimensions and a sample foot pattern of the M3T-FLX-80NRA

7. Precautions

⚠ CAUTION

Caution to Be Taken for This Product:

- When connecting the YQPACK080RA, be sure to use the included YQ-GUIDE's.
- Do not use the screws included with the YQPACK080RA to fix it.

IMPORTANT

Notes on This Product:

- For onboard evaluation, the required HQPACK depends on the MCU package you use. Please use the following HQPACK.
  For 80P6N-A package: HQPACK080RA168
  For 80P6U-A package: HQPACK080RA160
- We cannot accept any request for repair.
- For purchasing the NQPACK080RA, YQPACK080RA, HQPACK080RA168 and HQPACK080RA160, contact the following:
  ~~Daimaru Kogyo Ltd.~~ ~~http://www.daimarukogyo.co.jp/~~
  Tokyo Eletech Corporation http://www.tetc.co.jp/e_tet.htm
- For inquiries about the product or the contents of this manual, contact your local distributor.
  Renesas Tools Homepage http://www.renesas.com/en/tools

8. Correspondence of Connectors J1 and J2

Table 2 Correspondence of the Connectors

Pin No.	IC1	Pin No.	IC1	Pin No.	IC1	Pin No.	IC1
J1-1	65	J1-26	NC	J2-1	1	J2-26	25
J1-2	66	J1-27	41	J2-2	2	J2-27	26
J1-3	67	J1-28	42	J2-3	3	J2-28	27
J1-4	68	J1-29	43	J2-4	4	J2-29	28
J1-5	69	J1-30	44	J2-5	5	J2-30	29
J1-6	70	J1-31	45	J2-6	6	J2-31	30
J1-7	71	J1-32	46	J2-7	7	J2-32	31
J1-8	72	J1-33	47	J2-8	8	J2-33	32
J1-9	NC	J1-34	48	J2-9	9	J2-34	NC
J1-10	NC	J1-35	49	J2-10	10	J2-35	NC
J1-11	NC	J1-36	50	J2-11	11	J2-36	NC
J1-12	NC	J1-37	51	J2-12	12	J2-37	NC
J1-13	NC	J1-38	52	J2-13	13	J2-38	NC
J1-14	NC	J1-39	53	J2-14	14	J2-39	NC
J1-15	NC	J1-40	54	J2-15	15	J2-40	NC
J1-16	NC	J1-41	55	J2-16	16	J2-41	NC
J1-17	NC	J1-42	56	J2-17	17	J2-42	NC
J1-18	33	J1-43	57	J2-18	18	J2-43	73
J1-19	34	J1-44	58	J2-19	19	J2-44	74
J1-20	35	J1-45	59	J2-20	20	J2-45	75
J1-21	36	J1-46	60	J2-21	21	J2-46	76
J1-22	37	J1-47	61	J2-22	22	J2-47	77
J1-23	38	J1-48	62	J2-23	23	J2-48	78
J1-24	39	J1-49	63	J2-24	24	J2-49	79
J1-25	40	J1-50	64	J2-25	NC	J2-50	80

(NC: No connection)